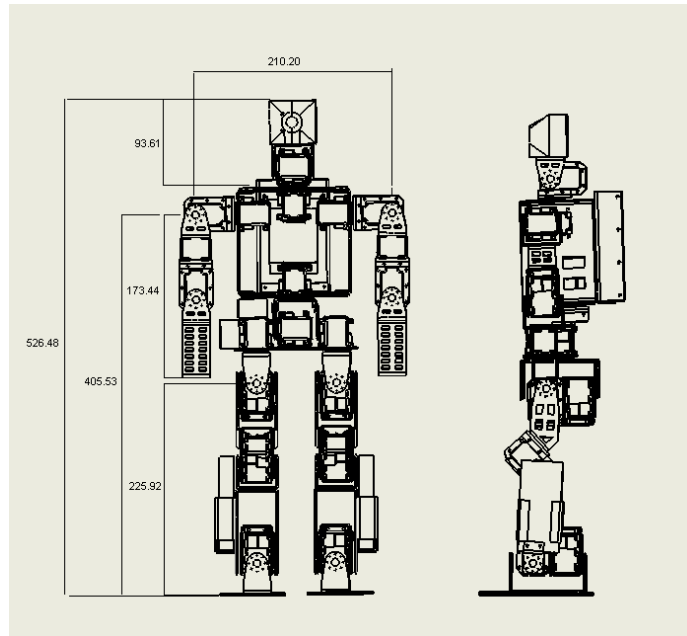
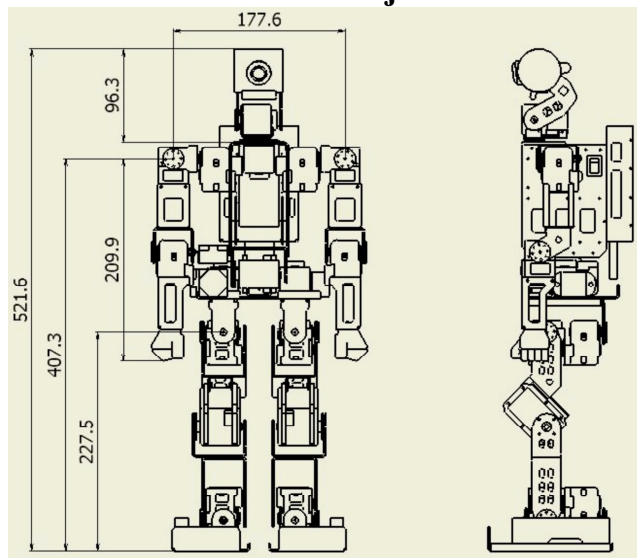


UChile RoadRunners – UCH H1 Robot



UChile RoadRunners – Hajime HR18 Robots



Hardware specifications

Player	Field Players (2)	Goalie Player (1)
Robot	Hajime HR18	UCH H1
Height	522 mm	526 mm
Weight	3.3 kg	3.04kg
Servo Motors	18x DX-117	22x RX-28
Dynamixel Robot Actuator	3x RX-64	
Degrees of freedom	21 leg: 6x2 arm: 3x2 waist: 1 neck: 2	22 leg: 6x2 arm: 3x2 waist: 2 neck: 2
Batteries	2x Li-Po 7.4V, 1500mAh	2x Li-Po 7.4V, 1500mAh
Internal Sensors		
Joint Angle Encoder	21	22
Accelerometer	Crossbow, CXL04LP3, 3 axes, rate 10 ms	Triple Axis Accelerometer - LIS3LV02DQ
Gyroscope	SSSJ, CRS03-04, 3 axes, rate 10 ms	SSSJ, CRS03-04, 3 axes, rate 10 ms
Camera	Philips ToUCam III - SPC900NC	Philips ToUCam III - SPC900NC
Sensor	CCD	CCD
Interpolated snapshot resolution	1.3 Mpixels	1.3 Mpixels
Max. frame rate	90 fps	90 fps
Lens	F2.2, D55°	F2.2, D55°
White balance	2600 – 7600 k	2600 – 7600 k
Min. illuminance	< 1 lux	< 1 lux
Colour depth	24 bit	24 bit
PC Link:	USB 1.1	USB 1.1
Control	Autonomous at frequency 10 ms	Autonomous at frequency 10 ms
Internal Controller	32bit DSP TMS320F28335 150MHz	32bit DSP TMS320F28335 150MHz
Pocket PC	Fujitsu Siemens Pocket LOOX N560	Fujitsu Siemens Pocket LOOX N560
Processor	Intel® PXA270 624 MHz based on Intel® XScale™ microarchitecture	Intel® PXA270 624 MHz based on Intel® XScale™ microarchitecture
Memory	System memory (RAM) 64 MB Flash memory (ROM) 128 MB	System memory (RAM) 64 MB Flash memory (ROM) 128 MB
Wireless LAN	Integrated, 802.11 b/g.	Integrated, 802.11 b/g.
Bluetooth V1.2	Integrated	Integrated
Operating system	Microsoft® Windows Mobile™ 5.0 Premium Edition	Microsoft® Windows Mobile™ 5.0 Premium Edition
Interfaces	1x built-in microphone, 1x speaker USB 1.1 (slave) via sync cable USB 1.1 (host) via sync cable Serial (RS232) via sync cable Stereo Audio Out on cradle connector	1x built-in microphone, 1x speaker USB 1.1 (slave) via sync cable USB 1.1 (host) via sync cable Serial (RS232) via sync cable Stereo Audio Out on cradle connector